AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116

Serial Number: 10/643,765 Filing Date: August 18, 2003

Title: BUFFER OVERFLOW DETECTION

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# APPLICANT'S REMARKS IN AN AMENDMENT

Applicant has carefully reviewed and considered the Final Office Action mailed on February 8, 2008, and the references cited therewith. This first reply is being filed within three months of the mailing date of the Final Office Action. If necessary and not otherwise provided, please consider this a Petition for Extension of Time under 37 CFR 1.136(a) for the necessary number of months for filing these papers in the above-identified application. Please charge any necessary fee or credit overpayment to Deposit Account No. 502931.

#### IN THE CLAIMS

Claims 26, 27, and 36 have been cancelled.

Claim 21 has been amended to include all of the limitations of cancelled claim 26 based on the Examiner's assertion that claim 26 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The amendment to claim 21 is supported by claims 21 and 26 as originally filed, and elsewhere in the application as originally filed. No new matter is added and no new issues are introduced, since claim 21 as amended to include the limitations of claim 26 is equivalent to claim 26 being amended to include the limitation of claim 21.

Claim 25 has been amended to include all of the limitations of claim 21 (prior to its current amendment) such that claim 25 is now in independent form. This amendment was made based on the Examiner's indication that claim 25 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and the amendment is supported by claims 21 and 25 as originally filed, and elsewhere in the application as originally filed.

Claims 30 and 31 have been amended to include all of the limitations of cancelled claim 27 such that claims 30 and 31 are now in independent form. These amendments were made based on the Examiner's indication that claims 30 and 31 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims,

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and the amendments are supported by claims 27, 30, and 31 as originally filed, and elsewhere in the application as originally filed.

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Claim 32 has been amended to include all of the limitations of cancelled claim 36 based on the Examiner's indication that claim 36 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The amendment to claim 32 is supported by claims 32 and 36 as originally filed, and elsewhere in the application as originally filed.

Please note that claim 35 is not currently amended. This claim had been amended in the response filed 11-17-2006 as follows:

> 35. (Currently amended) The apparatus of claim 32, wherein means for translating of the address for addresses of the instruction fetch instructions includes:

means for checking the non executable indication; and

means for disallowing an instruction-buffer load based on fetch in response to finding the non executable setting.

Please note that the word "of" in the first line had a strike-though to indicate it was to be deleted. The Response filed 11-13-2007 had inadvertently left the word, with the strike-through, in the claim. The deleted word has been removed from the claim in the present list of claims.

# **Applicant's Response to the Examiner's Response to Arguments**

## Claim Rejections Under 35 U.S.C. § 102(e)

#### 1) The Applicable Law for Rejections under 35 U.S.C. § 102

35 U.S.C. 102 Conditions for patentability; novelty and loss of right to patent.

A person shall be entitled to a patent unless –

- (e) the invention was described in
  - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent
  - (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

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For a cited reference to be prior art within the meaning of 35 U.S.C. § 102(e), all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

# 2) Analysis of the 35 U.S.C. § 102 Rejection of Claims

In section 3 of the February 8, 2008 Final Office Action, claims 21-22, 27, and 32-35 were rejected under 35 U.S.C. § 102(e) as being anticipated by Kolichtchak (US Publication 2003/0014667) – hereinafter, "Kolichtchak" and PaX documentation (http://pageexec.virtualave.net/). Applicant respectfully traverses. Applicant reserves the right to reintroduce the rejected claims in follow-on continuation and divisional applications. To facilitate issuance of the claims already indicated as allowable, Applicant has amended the claims 21 and 32 to be in a form indicated as allowable by the Examiner.

# In section 6 of the February 8, 2008 Final Office Action, the Examiner asserted

"Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

It should be noted that the prior art, Kolichtchak, discloses (1) a known PaX system, which the Examiner has cited sections to in the above rejection and the prior art discloses (2) a system which it believes to be an improvement of the PaX system. The Examiner has incorporated the PaX documentation into the rejection. The PaX documentation indicates that the PTE and TLB management [which includes the TLB miss handler) is the task of the paging subsystem of the operating system and thus it is the TLB management system which controls the setting of the flags (refer to page 2, section 3. the theory, 1st par.). Additionally, the PaX documentation indicates that the flag entries begin in state 0 and as the processor accesses the page, the state begins to change."

Applicant notes that the citation (to an internet site http://pageexec.virtualave\_net/) to the PaX

article does not contain any information whatsoever as to the purported PaX article.

As a first matter, Applicant notes that claim 27 has been cancelled. Additionally, Applicant notes that claims 21 and 32 have been amended to represent the independent form of now-cancelled claims 26 and 36, respectively. Since the Examiner indicated that claims 26 and 36 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, Applicant respectfully submits that claims 21 and 32 appear to be in condition for allowance, and reconsideration and withdrawal of the rejection of these claims under U.S.C. §102(e) are respectfully requested.

Further, claims 22 and 33-35 depend from currently amended independent claims 21 and 32, respectively, and appear to be patentable for at least the same reasons provided for claims 21 and 32, as well as for additional reasons related to their own recitations when considered as a whole with the claims from which they depend. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of dependent claims 22 and 33-35 under 35 U.S.C. §102(e).

## Allowable Subject Matter

Claims 1-20 and 37-44 have been allowed.

Claims 25-26, 30-31, and 36 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As mentioned above, claims 25, 26 (i.e., as claim 21), 30, 31, and 36 (i.e., as claim 32), have been rewritten in independent form: accordingly, Applicant respectfully submits that claims 25, 26 (which is now currently amended claim 21), 30-31, and 36 (which is now currently amended claim 32) appear in condition for allowance. Reconsideration and withdrawal of the objections and an early indication of allowance are respectfully requested.

Since claim 21 is now in allowable form, the previously rejected dependent claim 22, which depends from claim 21 also appears to be in condition for allowance and such action is respectfully requested.

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Since claim 32 is now in allowable form, the previously rejected dependent claims 33-35, which depend from claim 32 also appear to be in condition for allowance and such action is respectfully requested.

# **CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney Charles Lemaire (952-435-0201 or 952-898-7558) to facilitate allowance of this application.

If necessary and not otherwise provided, please consider this a request for an extension of time for a sufficient number of months to enter these papers. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 502931.

Respectfully submitted, ANDREW B. HASTINGS

By their Representatives, Lemaire Patent Law Firm, P.L.L.C.

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Date: May 8, 2008 By: /Charles A. Lemaire/

Charles A. Lemaire Reg. No. 36,198

#### CERTIFICATE UNDER 37 CFR 1.8(a)(1)(i)(C):

The undersigned hereby certifies that this document is being electronically filed via the U.S. Patent Office's EFS-Web filing system, addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 8th day of May, 2008, Central Time.

| Name               | Signature            |
|--------------------|----------------------|
| Charles A. Lemaire | /Charles A. Lemaire/ |